

IN THE CLAIMS

For the convenience of the Examiner, all pending claims of the present Application are shown below in numerical order.

1. (Previously Presented) A system for iontophoretic transdermal delivery of one or more therapeutic agents into a user's skin, comprising:

a first end comprising a first reservoir for containing one or more therapeutic agents;

a second end comprising a second reservoir for containing one or more therapeutic agents;

a self-contained power source for generating electric current, the power source comprising a first terminal and a second terminal;

a first electrode adapted to electrically couple the first terminal of the power source to the first reservoir, the first electrode operable to conduct electric current between the power source and the first reservoir to promote iontophoretic transdermal delivery of the one or more therapeutic agents contained within the first reservoir into the user's skin;

a second electrode adapted to electrically couple the second terminal of the power source to the second reservoir, the second electrode operable to conduct electric current between the power source and the second reservoir to promote iontophoretic transdermal delivery of the one or more therapeutic agents contained within the second reservoir into the user's skin; and

a foldable connecting portion coupling the first end to the second end and adapted to allow the system to be used in an extended or non-extended state, in the extended state the first and second ends being separated by a first predetermined distance with the connecting portion in an unfolded configuration, in the non-extended state the first and second ends being separated by a second distance less than the first distance with the connecting portion in a folded configuration.

2. (Original) The system of Claim 1, wherein the first and second reservoirs are adapted to deliver one or more therapeutic agents to one or more portions of a user's body substantially simultaneously.

3. (Original) The system of Claim 1, further comprising a protective covering associated with the connecting portion and adapted to be removably coupled to a hypoallergenic adhesive on a bottom of the connecting portion, the hypoallergenic adhesive adapted to removably couple the system to a portion of the user's body.

4. (Original) The system of Claim 1, further comprising a protective tab associated with each reservoir, each tab adapted to be removably coupled to a hypoallergenic adhesive associated with its reservoir and further adapted to protect and provide protection from the therapeutic agents in its reservoir during application of the system to the user's skin, the hypoallergenic adhesive adapted to removably couple the system to a portion of the user's body.

5. (Original) The system of Claim 1, wherein the first end is associated with a positive terminal of the power source and the second end is associated with a negative terminal of the power source.

6. (Original) The system of Claim 1, wherein each reservoir comprises:
a reservoir pad adapted to absorb the therapeutic agents to be delivered to the user;
and

a reservoir gasket adapted to help contain the therapeutic agents contained in the reservoir pad.

7. (Original) The system of Claim 6, wherein the reservoir gaskets comprise a soft, flexible, foldable, FDA-approved, hypoallergenic foam material.

8. (Original) The system of Claim 6, wherein the reservoir pads comprise a soft, flexible, foldable, absorbent, FDA-approved, hypoallergenic material.

9. (Original) The system of Claim 1, wherein the self-contained power source is a battery.

10. (Original) The system of Claim 9, wherein the battery is a 1.55 volt battery.

11. (Original) The system of Claim 1, wherein the first electrode, the second electrode, and the power source comprise a flex-circuit.

12. (Original) The system of Claim 11, further comprising a hidden pocket disposed on the first or second end and adapted to house the connecting portion and at least a portion of the flex-circuit when the system is in the non-extended state.

13. (Original) The system of Claim 1, wherein the system is adapted to be disposable after a single use.

14. (Original) The system of Claim 1, wherein the power source is insulated in a protective covering.

15. (Original) The system of Claim 14, wherein the protective covering is made from a polymer or gel-like substance.

16. (Original) The system of Claim 1, wherein the first electrode, the second electrode, and the power source are disposed between at least one layer of insulating material to protect the user's skin.

17. (Original) The system of Claim 1, wherein the system has a maximum thickness of approximately one-sixteenth of an inch.

18. (Previously Presented) A method for manufacturing a system for iontophoretic transdermal delivery of one or more therapeutic agents into a user's skin, comprising:

providing a first reservoir for containing one or more therapeutic agents;

providing a second reservoir for containing one or more therapeutic agents;

providing a self-contained power source for generating electric current, the power source comprising a first terminal and a second terminal;

providing a first electrode adapted to electrically couple the first terminal of the power source to the first reservoir, the first electrode operable to conduct electric current between the power source and the first reservoir to promote iontophoretic transdermal delivery of the one or more therapeutic agents contained within the first reservoir into the user's skin;

providing a second electrode adapted to electrically couple the second terminal of the power source to the second reservoir, the second electrode operable to conduct electric current between the power source and the second reservoir to promote iontophoretic transdermal delivery of the one or more therapeutic agents contained within the second reservoir into the user's skin; and

providing a foldable connecting portion coupling the first reservoir to the second reservoir and adapted to be used in an extended or non-extended state, in the extended state the first and second reservoirs being separated by a first predetermined distance with the connecting portion in an unfolded configuration, in the non-extended state the first and second reservoirs being separated by a second distance less than the first distance with the connecting portion in a folded configuration.

19. (Original) The method of Claim 18, wherein the first and second reservoirs are adapted to deliver one or more therapeutic agents to one or more portions of a user's body substantially simultaneously.

20. (Previously Presented) The method of Claim 18, further comprising providing a protective covering associated with the connecting portion and adapted to be removably coupled to a hypoallergenic adhesive on a bottom of the connecting portion, the hypoallergenic adhesive adapted to removably couple the system to a portion of the user's body.

21. (Original) The method of Claim 18, further comprising providing a protective tab associated with each reservoir, each tab adapted to be removably coupled to a hypoallergenic adhesive associated with its reservoir and further adapted to protect and provide protection from the therapeutic agents in its reservoir during application of the system to the user's skin, the hypoallergenic adhesive adapted to removably couple the system to a portion of the user's body.

22. (Original) The method of Claim 18, wherein the first end is associated with a positive terminal of the power source and the second end is associated with a negative terminal of the power source.

23. (Original) The method of Claim 18, further comprising:
providing for each reservoir a reservoir pad adapted to absorb the therapeutic agents to be delivered to the user; and
providing for each reservoir a reservoir gasket adapted to help contain the therapeutic agents contained in the reservoir pad.

24. (Original) The method of Claim 23, wherein the reservoir gaskets comprise a soft, flexible, foldable, FDA-approved, hypoallergenic foam material.

25. (Original) The method of Claim 23, wherein the reservoir pads comprise a soft, flexible, foldable, absorbent, FDA-approved, hypoallergenic material.

26. (Original) The method of Claim 18, wherein the self-contained power source is a battery.

27. (Original) The method of Claim 26, wherein the battery is a 1.55 volt battery.

28. (Original) The method of Claim 18, wherein the first electrode, the second electrode, and the power source comprise a flex-circuit.

29. (Original) The method of Claim 28, further comprising providing a hidden pocket disposed on the first or second end and adapted to house the connecting portion and at least a portion of the flex-circuit when the system is in the non-extended state.

30. (Original) The method of Claim 18, wherein the system is adapted to be disposable after a single use.

31. (Original) The method of Claim 18, further comprising providing a protective covering to insulate the power source.

32. (Original) The method of Claim 31, wherein the protective covering is made from a polymer or gel-like substance.

33. (Original) The method of Claim 18, further comprising providing at least one layer of insulating material disposed about the first electrode, the second electrode, and the power source, the insulating material adapted to protect the user's skin.

34. (Previously Presented) The method of Claim 18, wherein the system has a maximum thickness of approximately one-sixteenth of an inch.

35. (Cancelled)

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60. (Previously Presented) A system for iontophoretic transdermal delivery of one or more therapeutic agents into a user's skin, comprising:

a first end comprising a first reservoir adapted to contain one or more therapeutic agents;

a second end comprising a second reservoir adapted to contain one or more therapeutic agents;

the first and second reservoirs each comprising:

a reservoir pad adapted to absorb the therapeutic agents to be delivered to the user; and

a foam reservoir gasket adapted to help contain the therapeutic agents contained in the reservoir pad;

a battery for generating electric current, the battery positioned between the first and second reservoirs and comprising a bottom terminal directed toward a bottom surface of the system and a top terminal directed toward a top surface of the system;

a first substantially flat, substantially straight electrode extending in a first direction from the battery, the first electrode comprising a first end that is electrically coupled to the top terminal of the battery and comprising a second end that is electrically coupled to the one or more therapeutic agents contained in the reservoir pad of the first reservoir, the first electrode operable to conduct electric current between the battery and the first reservoir to promote iontophoretic transdermal delivery of the therapeutic agents contained in the first reservoir into the user's skin; and

a second substantially flat, substantially straight electrode extending in a second direction from the battery, the second electrode comprising a first end that is electrically coupled to the bottom terminal of the battery and comprising a second end that is electrically coupled to the one or more therapeutic agents contained in the reservoir pad of the second reservoir, the second electrode operable to conduct electric current between the battery and the second reservoir to promote iontophoretic transdermal delivery of the therapeutic agents contained in the second reservoir into the user's skin;

the first and second electrodes and the battery positioned along a substantially straight line between the first end and the second end;

the first and second electrodes lying in substantially the same plane.

61. (Previously Presented) The system of Claim 60, wherein:
the first electrode and the second electrode are each physically connected to the battery; and
a portion of one or both of the first or second electrodes extends from the plane in which the first and second electrodes substantially lie to physically connect to the battery.

62. (Previously Presented) The system of Claim 60, wherein the first and second reservoirs are adapted to each deliver at least one therapeutic agent to the user's skin substantially simultaneously.

63. (Previously Presented) The system of Claim 60, further comprising a protective tab associated with each reservoir, each tab adapted to be removably coupled to a hypoallergenic adhesive associated with its reservoir and further adapted to protect and provide protection from the therapeutic agents in its reservoir during application of the system to the user's skin, the hypoallergenic adhesive adapted to removably couple the system to a portion of the user's body.

64. (Previously Presented) The system of Claim 60, wherein the first electrode, the second electrode, and the battery comprise a flex-circuit.

65. (Previously Presented) The system of Claim 64, further comprising a hidden pocket disposed on the first or second end and adapted to house at least a portion of the flex-circuit when the system is in a non-extended state.

66. (Previously Presented) The system of Claim 60, wherein the first electrode, the second electrode, and the battery are covered by at least one layer of insulating material to protect the user's skin.

67. (Previously Presented) A method for manufacturing a system for iontophoretic transdermal delivery of one or more therapeutic agents into a user's skin, comprising:

providing a first reservoir adapted to contain one or more therapeutic agents;

providing a second reservoir adapted to contain one or more therapeutic agents;

providing for each reservoir a reservoir pad adapted to absorb the therapeutic agents to be delivered to the user;

providing for each reservoir a foam reservoir gasket adapted to help contain the therapeutic agents contained in the reservoir pad;

providing a battery for generating electric current, the battery positioned between the first and second reservoirs and comprising a bottom terminal directed toward a bottom surface of the system and a top terminal directed toward a top surface of the system;

providing a first substantially flat, substantially straight electrode extending in a first direction from the battery, the first electrode comprising a first end that is electrically coupled to the top terminal of the battery and comprising a second end that is electrically coupled to the one or more therapeutic agents contained in the reservoir pad of the first reservoir, the first electrode operable to conduct electric current between the battery and the first reservoir to promote iontophoretic transdermal delivery of the therapeutic agents contained in the first reservoir into the user's skin;

providing a second substantially flat, substantially straight electrode extending in a second direction from the battery, the second electrode comprising a first end that is electrically coupled to the bottom terminal of the battery and comprising a second end that is electrically coupled to the one or more therapeutic agents contained in the reservoir pad of the second reservoir, the second electrode operable to conduct electric current between the battery and the second reservoir to promote iontophoretic transdermal delivery of the therapeutic agents contained in the second reservoir into the user's skin;

positioning the first and second electrodes and the battery along a substantially straight line between the first end and the second end; and

positioning the first and second electrodes lying in substantially the same plane.

68. (Previously Presented) The method of Claim 67, further comprising physically connecting the first electrode and the second electrode to the battery, wherein a portion of one or both of the first or second electrodes extends from the plane in which the first and second electrodes substantially lie to physically connect to the battery.

69. (Previously Presented) The method of Claim 67, wherein the first and second reservoirs are adapted to each deliver at least one therapeutic agent to the user's skin substantially simultaneously.

70. (Previously Presented) The method of Claim 67, further comprising providing a protective tab associated with each reservoir, each tab adapted to be removably coupled to a hypoallergenic adhesive associated with its reservoir and further adapted to protect and provide protection from the therapeutic agents in its reservoir during application of the system to the user's skin, the hypoallergenic adhesive adapted to removably couple the system to a portion of the user's body.

71. (Previously Presented) The method of Claim 67, wherein the first electrode, the second electrode, and the battery comprise a flex-circuit.

72. (Previously Presented) The method of Claim 71, further comprising providing a hidden pocket disposed on the first or second end and adapted to house at least a portion of the flex-circuit when the system is in a non-extended state.

73. (Previously Presented) The method of Claim 67, further comprising providing at least one layer of insulating material disposed about the first electrode, the second electrode, and the battery, the insulating material adapted to protect the user's skin.

74. (Previously Presented) A method for delivering one or more therapeutic agents to a user through the user's skin, comprising:

positioning an iontophoretic transdermal delivery system on a portion of the user's body to receive treatment, the system comprising:

a first end comprising a first reservoir adapted to contain one or more therapeutic agents;

a second end comprising a second reservoir adapted to contain one or more therapeutic agents;

the first and second reservoirs each comprising:

a reservoir pad adapted to absorb the therapeutic agents to be delivered to the user; and

a foam reservoir gasket adapted to help contain the therapeutic agents contained in the reservoir pad;

a battery for generating electric current, the battery positioned between the first and second reservoirs and comprising a bottom terminal directed toward a bottom surface of the system and a top terminal directed toward a top surface of the system;

a first substantially flat, substantially straight electrode extending in a first direction from the battery, the first electrode comprising a first end that is electrically coupled to the top terminal of the battery and comprising a second end that is electrically coupled to the one or more therapeutic agents contained in the reservoir pad of the first reservoir, the first electrode operable to conduct electric current between the battery and the first reservoir to promote iontophoretic transdermal delivery of the therapeutic agents contained in the first reservoir into the user's skin; and

a second substantially flat, substantially straight electrode extending in a second direction from the battery, the second electrode comprising a first end that is electrically coupled to the bottom terminal of the battery and comprising a second end that is electrically coupled to the one or more therapeutic agents contained in the reservoir pad of the second reservoir, the second electrode operable to conduct electric current between the battery and the second reservoir to promote iontophoretic transdermal delivery of the therapeutic agents contained in the second reservoir into the user's skin;

the first and second electrodes and the battery positioned along a substantially straight line between the first end and the second end;

the first and second electrodes lying in substantially the same plane;

applying electrical current to any therapeutic agents contained in the reservoirs using the battery; and

delivering the therapeutic agents to the user through the user's skin in response to the electrical current.

75. (Previously Presented) The method of Claim 74, wherein:

the first electrode and the second electrode are each physically connected to the battery; and

a portion of one or both of the first or second electrodes extends from the plane in which the first and second electrodes substantially lie to physically connect to the battery.

76. (Previously Presented) The method of Claim 74, wherein the first and second reservoirs are adapted to each deliver at least one therapeutic agent to the user's skin substantially simultaneously.

77. (Previously Presented) The method of Claim 74, wherein the system further comprises a protective tab associated with each reservoir, each tab adapted to be removably coupled to a hypoallergenic adhesive associated with its reservoir and further adapted to protect and provide protection from the therapeutic agents in its reservoir prior to application of the system to the user's skin, the hypoallergenic adhesive adapted to removably couple the system to the portion of the user's body.

78. (Previously Presented) The method of Claim 74, wherein the first electrode, the second electrode, and the battery comprise a flex-circuit.

79. (Previously Presented) The method of Claim 78, wherein the system further comprises a hidden pocket disposed on the first or second end and adapted to house at least a portion of the flex-circuit when the system is in a non-extended state.

80. (Previously Presented) The method of Claim 74, wherein the first electrode, the second electrode, and the battery are covered by at least one layer of insulating material to protect the user's skin.

81. (New) The system of Claim 60, wherein the battery is positioned approximately midway between the first reservoir and the second reservoir.

82. (New) The method of Claim 67, and further comprising positioning the battery approximately midway between the first reservoir and the second reservoir.

83. (New) The method of Claim 74, and further comprising positioning the battery approximately midway between the first reservoir and the second reservoir.

84. (New) A system for iontophoretic transdermal delivery of one or more therapeutic agents into a user's skin, comprising:

a first end comprising a first reservoir adapted to contain one or more therapeutic agents;

a second end comprising a second reservoir adapted to contain one or more therapeutic agents;

a battery for generating electric current, the battery positioned between the first and second reservoirs and comprising a first terminal and a second terminal;

a first substantially flat, substantially straight electrode extending in a first direction from the battery, the first electrode comprising a first end that is electrically coupled to the first terminal of the battery and comprising a second end that is electrically coupled to the one or more therapeutic agents contained in the first reservoir, the first electrode operable to conduct electric current between the battery and the first reservoir to promote iontophoretic transdermal delivery of the therapeutic agents contained in the first reservoir into the user's skin; and

a second substantially flat, substantially straight electrode extending in a second direction from the battery, the second electrode comprising a first end that is electrically coupled to the second terminal of the battery and comprising a second end that is electrically coupled to the one or more therapeutic agents contained in the second reservoir, the second electrode operable to conduct electric current between the battery and the second reservoir to promote iontophoretic transdermal delivery of the therapeutic agents contained in the second reservoir into the user's skin;

the first and second electrodes and the battery positioned along a substantially straight line between the first end and the second end;

the first and second electrodes lying in substantially the same plane.

85. (New) The system of Claim 84, wherein the first and second reservoirs each comprise a reservoir pad adapted to absorb the therapeutic agents to be delivered to the user and a foam reservoir gasket adapted to help contain the therapeutic agents contained in the reservoir pad.

86. (New) The system of Claim 60, wherein at least one of the first electrode and the second electrode comprise a plurality of electrically conductive components.

87. (New) The system of Claim 86, wherein the plurality of electrically conductive components comprise at least two components formed from different materials.